

云南异白蚁属一新种

(等翅目:鼻白蚁科)

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关键词 等翅目 鼻白蚁科 异白蚁

尹氏异白蚁 *Heterotermes yinae* Zhu, Huang et Li 新种

兵蚁 (图 1—6)

体中型。头黄色,上颚赤褐色,基部浅黄,上唇基、触角堤脊黄褐色,上唇黄色,前胸背板、触角、足淡黄色,腹部乳白色。头部具稀疏长毛。上唇仅具端毛1对。前胸背板周缘密生长毛,后半部中线两侧各生数根长毛。数根长毛。腹节均环生长毛。

头近长方形,两侧近平行,最宽处位于头中后部,后侧角宽圆,后缘近平直。额峰微隆,但不高出后头背面,略有峰凹,呈“V”形。囟位于额后中央,凹下。上唇近似舌形,长大于宽,长宽比为0.923—0.709,透明端部呈乳头状小尖突。上颚粗状,端部内弯,外侧缘基部缢口下弧状扩张。左上颚尖端较细,内弯较剧,中部后方具3个锯齿,颚基齿宽大;右上颚尖端较左上颚同部位为宽,稍内弯,颚基处2个基齿甚明显。后颏

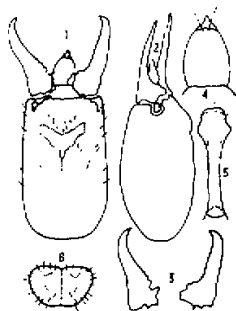


图 1—6 尹氏异白蚁 *Heterotermes yinae* sp. nov. 新种

1.头正面 2.头侧面 3.上唇
4.上唇 5.后颏 6.前胸背板

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表 1 尹氏异白蚊 10 个兵蚊量度 (毫米)

项 目	范 围	平均	项 目	范 围	平均
体 长	6.19—7.51	6.73	上唇宽	0.36—0.39	0.36
头长至上颚端	3.07—3.26	3.15	左上颚长	1.10—1.16	1.13
头长至上唇端	2.32—2.87	2.67	后颊长	1.55—1.68	1.64
头长至颏基	2.07—2.16	2.10	后颊最宽	0.48—0.52	0.51
头 最 宽	1.23—1.29	1.25	后颊最狭	0.16—0.16	0.16
头 最 狭	1.16—1.19	1.17	前胸背板长	0.52—0.55	0.522
头 高	1.07—1.16	1.10	前胸背板宽	0.94—0.97	0.965
上 唇 长	0.39—0.55	0.47	后足胫节长	0.97—1.03	1.01

表 2 尹氏异白蚊与三种国产异白蚊*量度比较 (毫米)

项 目	尖唇异白蚊	尹氏异白蚊	大别山异白蚊	罗浮异白蚊
头长至颏基	1.96	2.10	2.149	2.352
头最宽	1.30	1.25	1.31	1.457
头壳指数**	0.663	0.595	0.609	0.619
上唇长	—	0.47	0.501	0.58
上唇宽	—	0.36	0.40	0.41
前胸背板长	0.50	0.522	0.585	0.57
前胸背板宽	0.96	0.965	0.98	1.05
后足胫节长	—	1.01	1.032	1.10

* 依蔡邦华、黄复生(1983)论点,将大别山散白蚊 *Retioulitermes dabieshanensis*, 罗浮散白蚊 *R. luofunicus* 归入异白蚊属 *Heterotermes* 内。

** 头壳指数: 头最宽/头长至颏基

狭长, 前端甚宽大, 腰部两侧狭面近似平行, 宽与狭之指数为 0.333—0.308。触角 17 节, 第 3 节最短。

前胸背板狭于头部, 前缘中央凹陷, 略平直, 后缘微凹, 中线较明显。

胫节距 3 : 2 : 2。跗节 4 节。

比较, 尹氏异白蚊 *Heterotermes yinae*, 新种, 兵蚊个体近似大别山异白蚊 *H.*

dabieshanensis (Wang et Li) 但有以下特征加以区别之: ①大别山异白蚁个体略大于新种(表2); ②新种右上顎前端略宽于左上顎相应部位, 后者左、右上顎前端宽度相等; ③新种上唇近似舌形, 透明尖端具乳头状小尖突起, 且仅1对端毛, 而后者上唇呈三角矛形, 除1对端毛外, 另具侧端毛1对。此外, 与罗浮异白蚁 *H. luofunicus* (Zhu, Ma et Li) 相比, 罗浮异白蚁属大型种, 个体各部位均明显大于新种, 且兵蚁的头形、上唇、上顎、前胸背板等特征均与新种有明显的区别。

尖唇异白蚁 *Heterotermes aculabialis*

本新种谨以我国著名女昆虫学家尹文英先生命名。

寄主: 麻栎树 *Quercus* sp.

产地及生境 1982. IV. 23朱世模采自云南省思茅县坝区, 海拔1,330米。东经约100°57', 北纬22°47', 靠近北回归线。兵蚁108头, 工蚁11头。坝区属亚热带气候, 年平均气温17.7°C, 干湿季分明。红壤土, 植被以亚热带常绿阔叶林为主。标本编号: 82 IV 230260

模式标本 正模、副模均保存于中国科学院昆明动物研究所。

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A NEW SPECIES OF THE GENUS *HETEROTERMES* FROM YUNNAN, CHINA (ISOPTERA : RHINOTERMITIDAE)

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In recent years, only one species of the genus *Heterotermes* from Yunnan was described by Tsai *et* Huang (1977), *Heterotermes aculabialis* (Tsai *et* Huang). In April 1982, a new species was collected by one of the authors from Simao, southern area of Yunnan. This new species named in honor of Dr. Yin Wenying. She is a famous entomologist in China.

Heterotermes yinae, Zhu, Huang *et* Li, nov. sp.

Soldier: (Fig. 1-6)

Body middle-sized. Head yellow, mandibles reddish brown, postclypeus and antennal carinae yellowish brown, labrum yellow, pronotum, antennal and legs yellowish. Head with a few bristles, tip of labrum with two bristles, pronotum with many bristles along margin, abdomen with many bristles around each segment. Head elongate, parallel-sided, posterior wider than anterior, postero-lateral corners broadly rounded, posterior margin almost straight, frons gradually sloping anteriorly, V-shaped, frontanell opening distinct, slightly concave. Labrum longer than wide, tip elongate, papilla-shaped, hyaline. Mandibles elongate, tip slightly incurved, tip of left mandible thinner than right mandible, with three crenulations at base, right mandible with two crenulations at base. Postmentum elongate, widest in anterior half. Antennae with 17 articles, third shortest than others. Pronotum narrower than head, anterior margin concaved, almost straight, posterior margin slightly concaved.

Tibial spurs 3:2:2. Tarsi four-jointed.

Table 1. Measurements (in Mm) of 10 soldiers of *Heterotermes yinae*, new species

	Range	Mean
Length of head to tip of mandibles	3.07—3.26	3.15
Length of head to tip of labrum	2.32—2.87	2.67
Length of head to side base of mandibles	2.07—2.16	2.10
Maximum width of head	1.23—1.29	1.25
Minimum width of head	1.16—1.19	1.17
Height of head	1.07—1.16	1.10
Length of labrum	0.39—0.55	0.47
Width of labrum	0.36—0.39	0.36
Length of left mandible	1.10—1.16	1.13
Length of postmentum	1.55—1.68	1.64
Maximum width of postmentum	0.48—0.52	0.51
Minimum width of postmentum	0.16—0.16	0.16
Length of pronotum	0.52—0.55	0.522
Width of pronotum	0.94—0.97	0.965
Length of hind tibiae	0.97—1.03	1.01

Comparisons : The soldier of *Heterotermes yinae*, new species, come close to that of *H. dabieshanensis* (Wang et Li). But it can be easily distinguished by the following characters: 1. New species is smaller than that of *H. dabieshanensis*; 2. Tip of left mandible of the new species thinner than right mandible, *H. dabieshanensis* are be equal; 3. Labrum of the new species tongue-shaped, tip papilla-shaped, with two long bristles, *H. dabieshanensis* spear-shaped, with four bristles. Besides, the new species come close to that of *H. luofunicus* (Zhu, Ma et Li). But it also can be easily distinguished for the big-sized body. *H. luofunicus* is larger than that of the new species. (Tab. 2)

Table 2. Measurements (in Mm.) of *Heterotermes yinae*, nov. sp.
and the other three chinese species in comparisons.

	<i>H. acula- bialis</i>	<i>H. yinae</i>	<i>H. dabie- shanensis**</i>	<i>H. luofu- nicus**</i>
1. Length of head to side base of mandibles	1.96	2.10	2.149	2.352
2. Maximum width of head	1.30	1.25	1.31	1.457
3. 1./2.*	0.663	0.595	0.609	0.619
4. Length of labrum	—	0.47	0.501	0.58
5. Width of labrum	—	0.36	0.40	0.41
6. Length of pronotum	0.50	0.522	0.585	0.57
7. Width of pronotum	0.96	0.965	0.98	1.05
8. Length of hind tibiae	—	1.01	1.032	1.10

* 1./2. : Maximum width of head/length of head to side base of mandibles

** According to the argument of Tsai *et* Huang (1983) *Reticulitermes dabieshanensis*, *R. luofunicus* should be changed the genus. from *Reticulitermes* to *Heterotermes*.

Collected from Simao county, Yunnan Province (22°47' N latitude, 100°57' longitude), 1,330m above sea level, N 23 1982, by Zhu Shimo. Picked out from the trunk of *Quercus* sp., Specimen No. 82 N 230260. Soldiers (holotype, paratype) are deposited in Kunming Institute of Zoology, Academia Sinica.

Key words Isoptera Rhinotermitidae *Heterotermes*